SOME NEW GENERA OF ASILIDAE (DIPTERA).

By Frank M. Hull,[1] Oxford, Mississippi.

Recent studies of Diptera have brought to light several new genera of flies, two of which are described in this paper.

Apotinocerus n. gen.

Rather small flies, the abdomen tapered in females, cylindroid in males, with rather long stiff flat appressed pile on legs and abdomen. Mesonotal pile fine, sharp and setate. Antennal style exceptionally short, only as long as the second antennal segment. Not closely related to other genera, although the antennae resemble *Glaphyropyga* Schiner. Length 17 mm.

Head, lateral aspect: of normal length. Face scarcely visible on the upper fourth, but prominent and protuberant below on the remainder. Bristles begin at the lower third of occiput and consist of approximately twenty-two pair of stout moderately long bristles. The proboscis is short and rather slender. The palpi is of one segment. The antennae are slender, rather elongate, the first segment at least twice as long as the second, the third segment, excluding style, is as long as the first two segments together. The third segment is a little thickened at the base, slightly attenuate near apex, and bears a short style which is one-third as long as the third segment, slightly flattened, with a minute spine at apex.

Head, anterior aspect: head nearly circular in outline, divergent below. Face with numerous, moderately stiff bristles confined to the middle of the facial protuberance and with, at the epistomal margin, four pair of extremely stout, longer bristles directed downward. Vertex deeply excavated, ocellar protuberance low, with three or four pair of short divergent bristles.

Thorax: pollinose, including pleura. Acrosticals present; the dorsocentrals posteriorly become long and slender, with the last two pair quite stout. Bristles of mesonotum quite long and very stout; notopleura with two, the post supra-alar with one, post calli with two. Scutellar margin with a wide band of rather long slender bristles. Whole scutellum thick and convex, without distinct margin. Metanotal slopes bullose and pubescent only. Post metacoxal area membranous.

Legs: the femora are rather stout, especially the anterior four. Hind femora everywhere flat appressed pilose, with the following

[1] University of Mississippi.

bristles: six dorsolaterals, six ventrolaterals, one ventrobasal, five ventromedial, and four medials, which are confined to the basal third. Middle femora with three anterior bristles, three posteriors near the middle, four posteriorly at the apex, seven posteroventrally on the basal half, five anteroventrally through the middle. Anterior femora somewhat stouter, with long stiff white pile below and some erect white pile above but no bristles. End tarsi with long pulvilli. Claws sharp.

Wings: rather slender and hyaline; marginal cell closed with stalk, R_4 and R_5 end well before the wing apex, cell R_4 slightly narrowed at apex, fourth posterior cell closed with a long stalk, anal cell closed with a stalk. Ambient vein complete. Marginal cell distinctly widened. Costa and costal cells not expanded.

Abdomen: strongly tapered in females; only slightly tapered near the base in males. Abdomen considerably longer than the wings, especially in female; seven tergites present in the male with the eighth barely visible linearly. Seven tergites in the female, with the eighth quite elongate, conical and incorporated in ovipositor. Stout, white bristles present as follows: six pair on tergite one; five to eight pair posteriorly, subapically, encircling tergite two and three; and similarly with reduced numbers on tergite four, five and six. Male terminalia conspicuous, elongate, nonrotated, the upper forceps tightly opposed; middle forceps short, ventral plate deeply bilobed in the middle with a posteroventrally thick long opposed brush of stiff, bristly, white pile. Female terminalia as wide dorsally as laterally; apical portion dorsally split and pointed; spines absent.

Genotype: Proctacanthus brevistylatus Wulp.

Material studied: a male and a female from the Hermann collection.

Distribution: neotropical, 1 species (Argentina).

Strobilopygius n. gen.

Flies of medium size or smaller, of dark coloration, sparsely pilose. The lower two-thirds of the face is strongly protuberant, with many long bristles. The legs are stout and rather bristly. The abdomen is tapered, but rather wide at the base and distinctly flattened; the fourth posterior cell is closed. These flies suggest *Hypenetes* in appearance, differing sharply in the non-attenuate third antennal segment and the absence of spines on the female terminalia. Length 12 mm.

Head, lateral aspect: the face strongly convex and protuberant,

but the protuberance restricted to the lower two-thirds, leaving the upper third barely visible. Occipital bristles becoming stronger near the vertex, where they are strongly proclinate. Proboscis short, stout, held almost horizontally, slightly compressed laterally. Palpi clearly of two segments; first segment burst, second segment porate. The antennae rather short, the first segment nearly twice as long as the second, and both with abundant, rather long pile dorsally, laterally and ventrally. Third segment strongly swollen dorsoventrally, laterally compressed, and narrowed only at base and apex.

Head, anterior aspect: the face has numerous extremely long, stout bristles directed for the most part forward but slightly downward, the upper bristles more or less curved, the greater portion spread out as a triangular patch on the anteromedial part of the protuberance. The ocellar protuberance is low with oblique sides.

Thorax: pollinose and generally dull; the pile is scanty, fine and erect. Acrosticals and dorsocentrals present anteriorly. Humeri with numerous fine, long hairs. Material studied shows the following complement of bristles: humerals none, post humerals none, notopleurals two, supra-alars two, post callars three, scutellar marginals four pair.

Legs: all femora stout, especially upon the anterior and middle pair. Hind pair slightly attenuate basally; tibia not greatly thickened. The femora bear stout moderately long bristles; one dorsal near apex, two dorsolaterals in a row shortly removed from apex and three laterals situated over the middle area. The hind tibiae are thickly appressed pilose with a few long scattered bristly hairs ventrally and laterally and medially near the base and bearing stout, curved, moderately long bristles as follows: three dorsomedials, three dorsolaterals; three ventrolaterals; apex of anterior tibiae without spur. All end tarsi bear well developed pulvilli.

Wings: of normal breadth. Marginal cell widely opened. R_1 ending before the wing tip, fourth posterior cell closed and stalked, the vein closing this cell nearly parallel or continuous with the lower vein closing the discal cell. Anal cell closed and stalked. Alulae moderately wide; ambient vein complete.

Abdomen: as long as the wings, gently tapered, distinctly flattened, the first tergite laterally swollen and convexly ridged and this segment as wide as the mesonotum. Female with more strongly attenuate and pointed abdomen. Six tergites are well developed in the male, the seventh is visible dorsally but quite short, the eighth can also be seen from above but is a mere linear ridge.

Seven tergites present in the female; the eighth forms part of the ovipositor. Two to three weak bristles or coarse bristly hairs are present in the posterior corners of tergites two to six. Male terminalia conspicuous with upper forceps well developed, nonrotated. Female genitalia short, thrust obliquely upward with the terminal portion held at right angles; no spines.

Genotype: Dasypogon hirtipes Macquart.

Material studied: a male and a female from the Hermann collection.

Distribution: neotropical, 1 species (Chile area).

THREE NEW NEOTROPICAL TYPHLOCYBINE LEAFHOPPERS FROM ECONOMIC PLANTS.

By David A. Young, Jr.,[1] Washington, D. C.

Among the many new species of exotic leafhoppers submitted for identification each year, some are associated with economic plants, and names for these species are desirable, especially when taxonomic treatment of the groups to which they belong is not to be completed in the immediate future. The three species described below are examples.

Empoasca yusti n. sp.

Length of male 3.3 mm., of female 3.6–3.8 mm. Alcoholic material with an area on crown next each eye, and the basal angles of the scutellum, buff; forewing with yellow reflections. Male with sternal abdominal apodemes traversing two or three abdominal conjunctivae; genital capsule with anal processes broad basally, each tapered abruptly in basal half, slender and gradually tapered in apical half to acute apex, directed anteroventrad and extending to middle of pygofer disc; ventral pygofer processes exceeding posterior pygofer margin, each in lateral aspect gradually, slightly curved dorsad through most of length, the apex curved sharply dorsad and rotated laterad, in ventral aspect the two ventral pygofer processes convergent throughout length but not contiguous apically; aedeagus in lateral aspect with shaft abruptly tapered, appearing truncate at gonopore which is apical.

Male type (cat. no. 63034) and a series of paratypes of both

[1] Entomology Research Branch, Agricultural Research Service, United States Department of Agriculture.